

GenCore version 5.1.6  
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OM protein - protein search, using sw model

Run on: July 22, 2003, 11:37:13 ; Search time 38 Seconds

(without alignments)  
2051.358 Million cell updates/sec

Title: US-09-833-118-18

Perfect score: 3103

Sequence: 1 DAKSVVHRFKDLEENFK.....TCFAEEGKLVAAQALGL 585

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 908470 seqs, 133250620 residues

Total number of hits satisfying chosen parameters: 908470

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :			
A.Geneseq_101002.*			
1:	/SID2/gcgdata/geneseq/geneseq-emb1/AA1980.DAT.*	11	3103
2:	/SID2/gcgdata/geneseq/geneseq-emb1/AA1981.DAT.*	12	3103
3:	/SID2/gcgdata/geneseq/geneseq-emb1/AA1982.DAT.*	13	3103
4:	/SID2/gcgdata/geneseq/geneseq-emb1/AA1983.DAT.*	14	3103
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9:	/SID2/gcgdata/geneseq/geneseq-emb1/AA1988.DAT.*	19	3103
10:	/SID2/gcgdata/geneseq/geneseq-emb1/AA1989.DAT.*	20	3103
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13:	/SID2/gcgdata/geneseq/geneseq-emb1/AA1992.DAT.*	23	3103
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15:	/SID2/gcgdata/geneseq/geneseq-emb1/AA1994.DAT.*	25	3103
16:	/SID2/gcgdata/geneseq/geneseq-emb1/AA1995.DAT.*	26	3103
17:	/SID2/gcgdata/geneseq/geneseq-emb1/AA1996.DAT.*	27	3103
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19:	/SID2/gcgdata/geneseq/geneseq-emb1/AA1998.DAT.*	29	3103
20:	/SID2/gcgdata/geneseq/geneseq-emb1/AA1999.DAT.*	30	3103
21:	/SID2/gcgdata/geneseq/geneseq-emb1/AA2000.DAT.*	31	3103
22:	/SID2/gcgdata/geneseq/geneseq-emb1/AA2001.DAT.*	32	3103
23:	/SID2/gcgdata/geneseq/geneseq-emb1/AA2002.DAT.*	33	3103

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	3103	100.0	585	10	Mature human serum
2	3103	100.0	585	11	Human serum albumin
3	3103	100.0	585	11	Human serum albumin
4	3103	100.0	585	16	Human serum albumin
5	3103	100.0	585	18	HSA protein sequen
6	3103	100.0	585	21	Amino acid sequenc
7	3103	100.0	585	21	Yeast codon-biased
8	3103	100.0	585	22	Human mature album
9	3103	100.0	585	22	Human albumin (HA)
10	3103	100.0	585	22	Mature human serum

11	3103	100.0	585	22	AAE13129	Human albumin (HA)
12	3103	100.0	585	22	AAE12403	Human albumin (HA)
13	3103	100.0	585	22	AAE08578	Human serum albumi
14	3103	100.0	585	23	ABG63321	Human serum albumi
15	3103	100.0	585	23	ABJ00986	B lymphocyte stimu
16	3103	100.0	585	23	ABG33847	Human B Lymphocyte
17	3103	100.0	585	23	AAU75220	Mature form of hum
18	3103	100.0	609	21	AAE36542	Recombinant human
19	3103	100.0	609	21	AAE36549	Recombinant human
20	3103	100.0	609	21	AAE78147	Pre human serum al
21	3103	100.0	610	14	AAE39510	Chimeric human ser
22	3103	100.0	670	21	AAE36543	Recombinant human
23	3103	100.0	670	21	AAE36550	Recombinant human
24	3103	100.0	783	14	AAE39473	Prepro-HSA-G-CSF C
25	3103	100.0	787	14	AAE39477	G-CSF-(Gly)4-HSA C
26	3103	100.0	853	14	AAE39472	HSA-vWF(470-713) f
27	3099	99.9	585	10	AAE93344	Sequence of mature
28	3099	99.9	585	19	AAE59841	Mature protein of
29	3099	99.9	608	17	AAE96229	Human serum albumi
30	3099	99.9	609	4	AAE30089	Sequence of human
31	3099	99.9	609	17	AAE96232	Human serum albumi
32	3099	99.9	609	17	AAE94572	Cancer metastasis
33	3099	99.9	609	17	AAE88913	Human serum albumi
34	3099	99.9	609	19	AAE48095	Human serum albumi
35	3099	99.9	609	20	AAE06994	Human albumin. Ho
36	3099	99.9	609	22	AAE04148	Myosin light chain
37	3097	99.8	779	18	AAE22719	Human serum albumi
38	3097	99.8	784	18	AAE22717	Human serum albumi
39	3097	99.8	789	18	AAE22718	Human serum albumi
40	3097	99.8	794	18	AAE22720	Human serum albumi
41	3096	99.8	609	7	AAE60092	Sequence of prepro
42	3095	99.7	586	8	AAE70767	Human serum albumi
43	3095	99.7	609	13	AAE25309	HSA. Pichia pasto
44	3095	99.7	754	17	AAE92149	HSA.Fc gamma RII f
45	3095	99.7	978	19	AAE48096	Human serum albumi

ALIGNMENTS

RESULT 1	
AAE90388	AAE90388 standard; protein; 585 AA.
ID	AAE90388 standard; protein; 585 AA.
XX	
AC	AAE90388;
XX	
DT	01-NOV-1989 (first entry)
XX	
DE	Mature human serum albumin polypeptide.
XX	
KW	Human serum albumin; mature protein; new polypeptides;
KW	plasma expanders.
XX	
OS	Homo sapiens (Human).
XX	
PN	EF322094-A.
XX	
PD	28-JUN-1989.
XX	
PF	25-OCT-1988; 88EP-0310000.
XX	
PR	30-OCT-1987; 87GB-0025529.
XX	
PA	(DELT ) DELTA BIOTECH LTD.
XX	
PI	Ballance DJ, Hinchliffe E, Geisow MJ, Senior PJ;
XX	
DR	WPI; 1989-186464/26.
XX	
DR	N-PSDB; AAN90128.
XX	
PT	New N-terminal fragments of human serum albumin
PT	- esp. useful as blood plasma expanders.
XX	

PS Disclosure; fig 2; 20pp; English.  
 XX Mature protein of human serum albumin (see corresp. AAN90128).  
 CC Used to make new N-terminal fragments which are used as plasma  
 CC expanders, or as substitutes for HSA or BSA, in tissue culture  
 CC media.  
 XX Sequence 585 AA;

Query Match 100.0%; Score 3103; DB 10; Length 585;  
 Best Local Similarity 100.0%; Pred. No. 1e-254;  
 Matches 585; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 DAHSEVAHFRKDLGEENFKALVLIAPAYLQCCPFEDHVKLVNEVTEFAKTCVADSAE 60  
 DB 1 DAHSEVAHFRKDLGEENFKALVLIAPAYLQCCPFEDHVKLVNEVTEFAKTCVADSAE 60  
 QY 61 NDKSLHTLFGDKLCTVATLRETYGEMADCCAKQEPNERECFLQHKDDNPNLPRLVPEV 120  
 DB 61 NDKSLHTLFGDKLCTVATLRETYGEMADCCAKQEPNERECFLQHKDDNPNLPRLVPEV 120  
 QY 121 DVMTAFHDNEETFLKYLIEIARRHPFYAPPELLFFAKRYKAAPTECCQAADKAACLLP 180  
 DB 121 DVMTAFHDNEETFLKYLIEIARRHPFYAPPELLFFAKRYKAAPTECCQAADKAACLLP 180  
 QY 181 KLDELDEGKASSAKORLKCSLOKGERAFKAWAVARLSORFPKAEFAEYKSLVDTLTK 240  
 DB 181 KLDELDEGKASSAKORLKCSLOKGERAFKAWAVARLSORFPKAEFAEYKSLVDTLTK 240  
 QY 241 VHTCCGDLLECCADRADLAKYICENQDSISSKLECECEKPLEKSHCIAEVENDEMPA 300  
 DB 241 VHTCCGDLLECCADRADLAKYICENQDSISSKLECECEKPLEKSHCIAEVENDEMPA 300  
 QY 301 DLPSLAADRVESKDVCKNYAEAKDVLGMFLYAEARRHPDYSVLLILRLAKTYETILEK 360  
 DB 301 DLPSLAADRVESKDVCKNYAEAKDVLGMFLYAEARRHPDYSVLLILRLAKTYETILEK 360  
 QY 361 CAADPHCYAKVDFEKPVLVEEPQNLKQNCLEFQELGEYKFQNALVRYTKVPQVST 420  
 DB 361 CAADPHCYAKVDFEKPVLVEEPQNLKQNCLEFQELGEYKFQNALVRYTKVPQVST 420  
 QY 421 PTLVEVSRNLGKVGSKCKHPEAKMPCAEYLSVLNQLCVLHEKTPVSDRVTKCTES 480  
 DB 421 PTLVEVSRNLGKVGSKCKHPEAKMPCAEYLSVLNQLCVLHEKTPVSDRVTKCTES 480  
 QY 481 LVNRRPCFSALEVDETYVPKEFNAETFTFHADICTLSEKQIKKQTALVELVKKPKAT 540  
 DB 481 LVNRRPCFSALEVDETYVPKEFNAETFTFHADICTLSEKQIKKQTALVELVKKPKAT 540  
 QY 541 KEQLKAVMDDFAAVFEKCKADDKETCFAEFGKLVAAQAALGL 585  
 DB 541 KEQLKAVMDDFAAVFEKCKADDKETCFAEFGKLVAAQAALGL 585

RESULT 2  
 AAR05318  
 ID AAR05318 standard; protein; 585 AA.  
 XX AAR05318;  
 AC AAR05318;  
 DT 08-OCT-1990 (first entry)  
 DE Human serum albumin gene product.  
 KW Human serum albumin; HSA-A; yeast; ds.  
 XX Homo sapiens.  
 OS JP02117384-A.  
 PN 01-MAY-1990.  
 PD 26-OCT-1988; 88JP-0268302.  
 PF

XX 26-OCT-1988; 88JP-0268302.  
 XX (TOFU) TOA NENRYO KOGYO KK.  
 XX WPI; 1990-176228/23.  
 XX N-PSDB; AAQ04719.  
 XX Human serum albumin prep. by yeast host -  
 PT by culturing transformed plasmid yeast to produce serum, and  
 PT removing it.  
 XX Disclosure; ; pp; Japanese.  
 XX Mature HSA-A may be produced using the sequence incorporated into a  
 CC plasmid vector with suitable controllers, and transferred to a yeast  
 CC expression system.  
 XX Sequence 585 AA;  
 SQ Query Match 100.0%; Score 3103; DB 11; Length 585;  
 Best Local Similarity 100.0%; Pred. No. 1e-254;  
 Matches 585; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 DAHSEVAHFRKDLGEENFKALVLIAPAYLQCCPFEDHVKLVNEVTEFAKTCVADSAE 60  
 DB 1 DAHSEVAHFRKDLGEENFKALVLIAPAYLQCCPFEDHVKLVNEVTEFAKTCVADSAE 60  
 QY 61 NDKSLHTLFGDKLCTVATLRETYGEMADCCAKQEPNERECFLQHKDDNPNLPRLVPEV 120  
 DB 61 NDKSLHTLFGDKLCTVATLRETYGEMADCCAKQEPNERECFLQHKDDNPNLPRLVPEV 120  
 QY 121 DVMTAFHDNEETFLKYLIEIARRHPFYAPPELLFFAKRYKAAPTECCQAADKAACLLP 180  
 DB 121 DVMTAFHDNEETFLKYLIEIARRHPFYAPPELLFFAKRYKAAPTECCQAADKAACLLP 180  
 QY 181 KLDELDEGKASSAKORLKCSLOKGERAFKAWAVARLSORFPKAEFAEYKSLVDTLTK 240  
 DB 181 KLDELDEGKASSAKORLKCSLOKGERAFKAWAVARLSORFPKAEFAEYKSLVDTLTK 240  
 QY 241 VHTCCGDLLECCADRADLAKYICENQDSISSKLECECEKPLEKSHCIAEVENDEMPA 300  
 DB 241 VHTCCGDLLECCADRADLAKYICENQDSISSKLECECEKPLEKSHCIAEVENDEMPA 300  
 QY 301 DLPSLAADRVESKDVCKNYAEAKDVLGMFLYAEARRHPDYSVLLILRLAKTYETILEK 360  
 DB 301 DLPSLAADRVESKDVCKNYAEAKDVLGMFLYAEARRHPDYSVLLILRLAKTYETILEK 360  
 QY 361 CAADPHCYAKVDFEKPVLVEEPQNLKQNCLEFQELGEYKFQNALVRYTKVPQVST 420  
 DB 361 CAADPHCYAKVDFEKPVLVEEPQNLKQNCLEFQELGEYKFQNALVRYTKVPQVST 420  
 QY 421 PTLVEVSRNLGKVGSKCKHPEAKMPCAEYLSVLNQLCVLHEKTPVSDRVTKCTES 480  
 DB 421 PTLVEVSRNLGKVGSKCKHPEAKMPCAEYLSVLNQLCVLHEKTPVSDRVTKCTES 480  
 QY 481 LVNRRPCFSALEVDETYVPKEFNAETFTFHADICTLSEKQIKKQTALVELVKKPKAT 540  
 DB 481 LVNRRPCFSALEVDETYVPKEFNAETFTFHADICTLSEKQIKKQTALVELVKKPKAT 540  
 QY 541 KEQLKAVMDDFAAVFEKCKADDKETCFAEFGKLVAAQAALGL 585  
 DB 541 KEQLKAVMDDFAAVFEKCKADDKETCFAEFGKLVAAQAALGL 585

RESULT 3  
 AAR08457  
 ID AAR08457 standard; Protein; 585 AA.  
 XX AAR08457;  
 AC AAR08457;  
 DT 16-APR-1991 (first entry)  
 XX

DE Human serum albumin.  
XX HSA; folding; ss.  
KW Homo sapiens.  
XX Key Location/Qualifiers  
XX Region 123..303  
XX /label= A  
XX Region 1..303  
XX /label= B  
XX Region 123..585  
XX /label= C  
XX JP02227079-A.  
XX 25-AUG-1989.  
XX 10-SEP-1990; 90JP-0250926.  
XX 06-OCT-1988; 88JP-0250926.  
XX (TOFU ) TONEN CORP.  
XX WPI; 1990-317325/42.  
XX N-PSDB; AAQ06099.  
XX New human serum albumin fragments - used to bond medicines and for  
XX stable folding of protein(s).  
XX Claim 1; Fig 8; 24pp; Japanese.  
XX Fragments A-C of HSA are expressed as fusion proteins with the  
XX signal peptide of E. coli alkaline phosphatase. The fragments are  
XX selected for their specific properties. The C-terminal truncated  
XX fragment, B, does not bind long-chain fatty acids but does bind to  
XX various medicines at the central region. The N-terminal truncated  
XX fragment, C, has good stability in protein folding. The central  
XX segment, A, has characteristics of both B and C.  
XX See also AAQ06096-Q06098.  
XX Sequence 585 AA;  
SQ  
Query Match 100.0%; Score 3103; DB 11; Length 585;  
Best Local Similarity 100.0%; Pred. No. 1e-254;  
Matches 585; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 DAHSEVAHREKDLGEENFKALVLIATAFAQYLQCCPFEDHVKLVNEVTEFAKTCVADESAE 60  
DB 1 DAHSEVAHREKDLGEENFKALVLIATAFAQYLQCCPFEDHVKLVNEVTEFAKTCVADESAE 60  
QY 61 NCDKSLHTLFGDKLCTVATIRETYGEMADCCAKOEPERNECFLOHKDDNPNLPRLVRPEV 120  
DB 61 NCDKSLHTLFGDKLCTVATIRETYGEMADCCAKOEPERNECFLOHKDDNPNLPRLVRPEV 120  
QY 121 DVNCTAFHDNEETFLKKYLYIARHPHYFAPELLFAKRYAAATECCQAADKAACLLP 180  
DB 121 DVNCTAFHDNEETFLKKYLYIARHPHYFAPELLFAKRYAAATECCQAADKAACLLP 180  
QY 181 KLDELDRGKASSAKQLKASLOKFGRAFKAWARELISORPFAEFVSKLVIDLTK 240  
DB 181 KLDELDRGKASSAKQLKASLOKFGRAFKAWARELISORPFAEFVSKLVIDLTK 240  
QY 241 VITECHGDLECADRADLAKYICENQDSISSKLECKECPPLLEKSHCIAEVENDEMPA 300  
DB 241 VITECHGDLECADRADLAKYICENQDSISSKLECKECPPLLEKSHCIAEVENDEMPA 300  
QY 301 DLPSLAADFVSKDVCNKAARAKDVLGMFLYIARHPDYSVLLLLAKTYETTLK 360  
DB 301 DLPSLAADFVSKDVCNKAARAKDVLGMFLYIARHPDYSVLLLLAKTYETTLK 360  
QY 361 CAAADPHECYAKVDEEKLPLVEEPQNLKONCELFQOLGEYKFNQALLVRYTKKVPQVST 420  
DB 361 CAAADPHECYAKVDEEKLPLVEEPQNLKONCELFQOLGEYKFNQALLVRYTKKVPQVST 420  
QY 421 PTLVEVSRNLKGVSKCKHPEAKRMPCAEDYLSVLNQLCVLHEKTPVSDRYTKCTTES 480  
DB 421 PTLVEVSRNLKGVSKCKHPEAKRMPCAEDYLSVLNQLCVLHEKTPVSDRYTKCTTES 480  
QY 481 LVNRRPCFSALEVDVETVYKPEFNAETFTFHADICTLSEKERQIKKOTALVELVKKPKAT 540  
DB 481 LVNRRPCFSALEVDVETVYKPEFNAETFTFHADICTLSEKERQIKKOTALVELVKKPKAT 540  
QY 541 KEOLKAVMDDEFAFVEKCKKADDDKTCFAEKGKLVAAASQAALGL 585  
DB 541 KEOLKAVMDDEFAFVEKCKKADDDKTCFAEKGKLVAAASQAALGL 585  
RESULT 4  
AAR80301  
ID AAR80301 standard; Protein: 585 AA.  
XX AC AAR80301;  
XX 17-JAN-1996 (first entry)  
XX Human serum albumin.  
XX Serum albumin; HSA; aspartyl protease-3; Yap3p;  
XX Saccharomycetes cerevisiae.  
XX Homo sapiens.  
XX WO9523857-A1.  
XX 08-SEP-1995.  
XX 01-MAR-1995; 95WO-GB00434.  
XX 05-MAR-1994; 94GB-0004270.  
XX (DELZ ) DELTA BIOTECHNOLOGY LTD.  
XX Gilbert SC, Kerry-Williams SM;  
XX WPI: 1995-320572/41.  
XX N-PSDB; AAQ98695.  
XX Yeast with reduced levels of aspartyl protease 3 proteolytic  
XX activity - used to secrete human albumin without prodrn. of the 45  
XX kD fragment  
XX Example 1; Page 26-28; 50pp; English.  
XX The cDNA given in AAQ98695, which encodes HSA (AAR80301), was subjected  
XX to site-directed mutagenesis to investigate the role of  
XX endoproteases in the generation of a 45 kDa albumin fragment obtd.  
XX when the cDNA is expressed in S. cerevisiae. Mutations were: R410A;  
XX L407A, L409A, V409A; and R410A, K413Q, K414Q. The latter set of  
XX mutations, especially, improved stability of HSA to yeast Yap3p  
XX proteolytic cleavage, allowing increased prodrn. of recombinant HSA.  
XX Sequence 585 AA;  
SQ  
Query Match 100.0%; Score 3103; DB 16; Length 585;  
Best Local Similarity 100.0%; Pred. No. 1e-254;  
Matches 585; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 DAHSEVAHREKDLGEENFKALVLIATAFAQYLQCCPFEDHVKLVNEVTEFAKTCVADESAE 60  
DB 1 DAHSEVAHREKDLGEENFKALVLIATAFAQYLQCCPFEDHVKLVNEVTEFAKTCVADESAE 60  
QY 61 NCDKSLHTLFGDKLCTVATIRETYGEMADCCAKOEPERNECFLOHKDDNPNLPRLVRPEV 120  
DB 61 NCDKSLHTLFGDKLCTVATIRETYGEMADCCAKOEPERNECFLOHKDDNPNLPRLVRPEV 120

QY 121 DVMCTAFHNEETFLKKYLYIARRHPYFYAPPELLFFAKRYKAAFTCCQADKAACLIP 180  
DB 121 DVMCTAFHNEETFLKKYLYIARRHPYFYAPPELLFFAKRYKAAFTCCQADKAACLIP 180  
QY 181 KLDELDEGKASSAKQRLKCSLOKFGERAFAKAWAVARLSQRFPAEFAVSKLYTDLTK 240  
DB 181 KLDELDEGKASSAKQRLKCSLOKFGERAFAKAWAVARLSQRFPAEFAVSKLYTDLTK 240  
QY 241 VHTCCGHDLLCADDADRLAKYICENQDSISSKLEKCEKPLLEKSHCIAEVENDEMPA 300  
DB 241 VHTCCGHDLLCADDADRLAKYICENQDSISSKLEKCEKPLLEKSHCIAEVENDEMPA 300  
QY 301 DLPISLAADFVESKDVCKNYAEAKDVFLGMFLYFYARRHPDYSVVLLRLAKTYETTLK 360  
DB 301 DLPISLAADFVESKDVCKNYAEAKDVFLGMFLYFYARRHPDYSVVLLRLAKTYETTLK 360  
QY 361 CAADPHCEYAKVDFEFKPLVEEPONLIKONCELFQGEYKFNALLVRYTKVQVST 420  
DB 361 CAADPHCEYAKVDFEFKPLVEEPONLIKONCELFQGEYKFNALLVRYTKVQVST 420  
QY 421 PTLVEVSRNLGKVGSKCKHPEAKRMPCAEDYLSVLNQLCVLHEKTPVSDRYTKCCTES 480  
DB 421 PTLVEVSRNLGKVGSKCKHPEAKRMPCAEDYLSVLNQLCVLHEKTPVSDRYTKCCTES 480  
QY 481 LVNRRPCFSALEVDETYVPKEFNAETFTFHADICTLSEKEROIKKQATLVLYVKKHPRAT 540  
DB 481 LVNRRPCFSALEVDETYVPKEFNAETFTFHADICTLSEKEROIKKQATLVLYVKKHPRAT 540  
QY 541 KEQLKAVMDDFAAVFEKCKADDKETCFABEGKKLVAAASQAALGL 585  
DB 541 KEQLKAVMDDFAAVFEKCKADDKETCFABEGKKLVAAASQAALGL 585

RESULT 5  
ID AAO20111 standard; Protein; 585 AA.  
XX AAO20111;  
AC AAO20111;  
XX AAO20111;  
DT 06-AUG-2002 (first entry)  
DE HSA protein sequence related to the growth hormone protein.  
KW Serum albumin-growth hormone fusion protein; growth hormone;  
KW Down's syndrome.  
XX Unidentified.  
XX KE99076789-A.  
PD 15-OCT-1999.  
XX 25-JUN-1998; 98XR-0704914.  
XX 30-DEC-1995; 95GB-0026733.  
PR 19-DEC-1996; 96WO-GB03164.  
XX (DELTA ) DELTA BIOTECHNOLOGY LTD.  
XX WPI: 1997-363680/55.  
DR N-PSDB; AAK99568.  
XX Serum albumin-growth hormone fusion protein - useful to treat growth  
PT hormone related diseases, e.g. Down's syndrome  
XX Disclosure; Fig 6; 21pp; Korean.  
XX The invention relates to a serum albumin-growth hormone fusion protein -  
CC useful to treat growth hormone related diseases such as Down's syndrome.  
CC This sequence represents a HSA protein related to the serum albumin-  
CC growth hormone protein of the invention.  
XX Sequence 585 AA;

Query Match 100.0%; Score 3103; DB 18; Length 585;  
Best Local Similarity 100.0%; Pred. No. 1e-254;  
Matches 585; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 DAHSEVAHFKDGLGENFKALVLTAFQAQYLQCCPFEDHVKLVNEVTEFAKTCVADESAE 60  
DB 1 DAHSEVAHFKDGLGENFKALVLTAFQAQYLQCCPFEDHVKLVNEVTEFAKTCVADESAE 60  
QY 61 NDKSLHTLFGDKLCVATRETYGEMADCCAKQBPNERNECFLOKDDNPNLRLVPRPV 120  
DB 61 NDKSLHTLFGDKLCVATRETYGEMADCCAKQBPNERNECFLOKDDNPNLRLVPRPV 120  
QY 121 DVMCTAFHNEETFLKKYLYIARRHPYFYAPPELLFFAKRYKAAFTCCQADKAACLIP 180  
DB 121 DVMCTAFHNEETFLKKYLYIARRHPYFYAPPELLFFAKRYKAAFTCCQADKAACLIP 180  
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DB 181 KLDELDEGKASSAKQRLKCSLOKFGERAFAKAWAVARLSQRFPAEFAVSKLYTDLTK 240  
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DB 241 VHTCCGHDLLCADDADRLAKYICENQDSISSKLEKCEKPLLEKSHCIAEVENDEMPA 300  
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DB 301 DLPISLAADFVESKDVCKNYAEAKDVFLGMFLYFYARRHPDYSVVLLRLAKTYETTLK 360  
QY 361 CAADPHCEYAKVDFEFKPLVEEPONLIKONCELFQGEYKFNALLVRYTKVQVST 420  
DB 361 CAADPHCEYAKVDFEFKPLVEEPONLIKONCELFQGEYKFNALLVRYTKVQVST 420  
QY 421 PTLVEVSRNLGKVGSKCKHPEAKRMPCAEDYLSVLNQLCVLHEKTPVSDRYTKCCTES 480  
DB 421 PTLVEVSRNLGKVGSKCKHPEAKRMPCAEDYLSVLNQLCVLHEKTPVSDRYTKCCTES 480  
QY 481 LVNRRPCFSALEVDETYVPKEFNAETFTFHADICTLSEKEROIKKQATLVLYVKKHPRAT 540  
DB 481 LVNRRPCFSALEVDETYVPKEFNAETFTFHADICTLSEKEROIKKQATLVLYVKKHPRAT 540  
QY 541 KEQLKAVMDDFAAVFEKCKADDKETCFABEGKKLVAAASQAALGL 585  
DB 541 KEQLKAVMDDFAAVFEKCKADDKETCFABEGKKLVAAASQAALGL 585

RESULT 6  
AAV84873  
ID AAV84873 standard; protein; 585 AA.  
XX AAV84873;  
AC AAV84873;  
XX AAV84873;  
DT 08-AUG-2000 (first entry)  
DE Amino acid sequence of a human albumin protein.  
DE Human; albumin; ischemic state; serum protein; metal ion salt;  
KW peroperative ischemia; ischemia; myocardial infarction;  
KW progressive coronary artery disease.  
XX Homo sapiens.  
OS Homo sapiens.  
XX Key Location/Qualifiers  
FT Modified-site 1  
FT /note= "optionally acetylated, and claimed under  
FT claim 56"  
XX WO2000020840-A1.  
XX 13-APR-2000.  
XX 01-OCT-1999; 99WO-US22905.  
XX

PR 02-OCT-1998; 98US-0102738.  
PR 02-OCT-1998; 98US-0165381.  
PR 02-OCT-1998; 98US-0165926.  
PR 11-JAN-1999; 99US-0115392.  
XX (ISCH-) ISCHEMIA TECHNOLOGIES INC.  
XX  
XX Bar-Or D, Lau E, Winkler JV;  
XX WPI; 2000-303843/26.  
XX  
PT New method for the continuous detection of ischemic states comprises  
PT detecting and quantifying the existence of an alteration of the serum  
PT protein albumin  
XX  
XX Disclosure; Page 97-100; 105pp; English.  
XX  
XX The present sequence represents human albumin protein. The specification  
CC describes a method for the continuous detection of ischemic states. The  
CC method comprises detecting and quantifying the existence of an alteration  
CC of the serum protein albumin. The method comprises contacting a  
CC biological sample containing albumin from the patient with an excess  
CC quantity of a metal ion salt, where the metal ion binds to the N-terminus  
CC of naturally occurring human albumin, to form a mixture containing bound  
CC metal ions and unbound metal ions, and then determining the amount of  
CC metal ions bound to the albumin N-terminus. The amount of bound metal  
CC ions is correlated to a known value to determine the occurrence or  
CC non-occurrence of an ischemic event. The methods are useful for detection  
CC of ischemic states. The methods are also useful for distinguishing  
CC peroperative ischemia from ischemia caused by, amongst other things,  
CC myocardial infarctions and progressive coronary artery disease.  
XX  
XX Sequence 585 AA;

Query Match 100.0%; Score 3103; DB 21; Length 585;  
Best Local Similarity 100.0%; Pred. No. 1e-254;  
Matches 585; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 DAHKSVAHRFDLGEENFKALVLIAPQYLOQCFFEDHVKLVNEVTEFAKTCVADSAE 60  
DB 1 DAHKSVAHRFDLGEENFKALVLIAPQYLOQCFFEDHVKLVNEVTEFAKTCVADSAE 60  
QY 61 NCKSLHTLFGDKLCTVATRETYGEMADCCAKQPERNECFLOHDDNPNPLRVREY 120  
DB 61 NCKSLHTLFGDKLCTVATRETYGEMADCCAKQPERNECFLOHDDNPNPLRVREY 120  
QY 121 DVMTAFHDNEETFLKYLVEIARRHPYFYAPPELLFTAKRYKAAFTCCQAADKAACLLP 180  
DB 121 DVMTAFHDNEETFLKYLVEIARRHPYFYAPPELLFTAKRYKAAFTCCQAADKAACLLP 180  
QY 181 KLDELDEGKASSAKQRLKASQKQGERAFKAWAVARLSORPPKAEFAEYSLVTLTK 240  
DB 181 KLDELDEGKASSAKQRLKASQKQGERAFKAWAVARLSORPPKAEFAEYSLVTLTK 240  
QY 241 VHTCCGDLLECADRADLAKYICENQDSISSKKECKPILLESKSHCIAEVDENMPA 300  
DB 241 VHTCCGDLLECADRADLAKYICENQDSISSKKECKPILLESKSHCIAEVDENMPA 300  
QY 301 DLPSLAADFVSKOVCKNYAEADVPLGMFLYEVARRHPDYSVVLLRLAKTYETLEK 360  
DB 301 DLPSLAADFVSKOVCKNYAEADVPLGMFLYEVARRHPDYSVVLLRLAKTYETLEK 360  
QY 361 CAAADPHCYAKVDFEKPVEEPQNLKQNCLEFQGLYKQFQNALVRYTKVPOVST 420  
DB 361 CAAADPHCYAKVDFEKPVEEPQNLKQNCLEFQGLYKQFQNALVRYTKVPOVST 420  
QY 421 PTLVSVRNLMKVGSKCKHPEAKRMPCAEDYLSVNLQCLVHEKTPVSDRVTKCTES 480  
DB 421 PTLVSVRNLMKVGSKCKHPEAKRMPCAEDYLSVNLQCLVHEKTPVSDRVTKCTES 480  
QY 481 LVNRRCPFSALEVDVTPVEENAEFTFHDICTLSEKROJLKQTALVELVHKPKAT 540  
DB 481 LVNRRCPFSALEVDVTPVEENAEFTFHDICTLSEKROJLKQTALVELVHKPKAT 540

QY 541 KEQLKAVMDFAAFVEKCKADDKETCFAEKGKLVAAASQAALGL 585  
DB 541 KEQLKAVMDFAAFVEKCKADDKETCFAEKGKLVAAASQAALGL 585

RESULT 7  
AY83946  
ID AY83946 standard; Protein; 585 AA.  
XX AC AY83946;  
XX 28-JUL-2000 (first entry)  
XX Yeast codon-biased recombinant human serum albumin protein.  
XX Recombinant; human serum albumin; HSA; yeast codon bias; host cell;  
KW overlapping oligonucleotide; expression vector.  
XX Homo sapiens.  
OS Synthetic.  
XX CN1239103-A.  
XX 22-DEC-1999.  
XX 17-JUN-1998; 98CN-0102506.  
XX 17-JUN-1998; 98CN-0102506.  
XX (HALJ-) HALJI BIOENGINEERING CO LTD.  
XX Li S, Lu D;  
XX WPI; 2000-351198/31.  
XX N-PSDB; AAA10091.  
XX Process for preparing recombinant human serum albumin - which comprises  
PT yeast biased sex codons  
XX Disclosure; Fig 1; 44pp; Chinese.  
XX The method relates to a method of recombinantly producing human serum  
CC albumin (HSA) in yeast by altering the coding sequence of HSA to  
CC comprise a yeast codon bias. The complete HSA gene (AAA10091) was  
CC generated as three synthetic fragments (AAA10092-Al0094) joined by  
CC recombinant DNA technology. Each HSA fragment was synthesised from  
CC overlapping oligonucleotide fragments that were extended. This sequence  
CC represents the complete sequence of the HSA encoded by the human gene  
CC with a yeast codon bias. The invention also covers a recombinant  
CC expression vector, yeast host cells carrying the recombinant expression  
CC vector and the process for producing human serum albumin in the yeast  
CC host cell, especially in secretory mode.  
XX SQ Sequence 585 AA;

Query Match 100.0%; Score 3103; DB 21; Length 585;  
Best Local Similarity 100.0%; Pred. No. 1e-254;  
Matches 585; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 DAHKSVAHRFDLGEENFKALVLIAPQYLOQCFFEDHVKLVNEVTEFAKTCVADSAE 60  
DB 1 DAHKSVAHRFDLGEENFKALVLIAPQYLOQCFFEDHVKLVNEVTEFAKTCVADSAE 60  
QY 61 NCKSLHTLFGDKLCTVATRETYGEMADCCAKQPERNECFLOHDDNPNPLRVREY 120  
DB 61 NCKSLHTLFGDKLCTVATRETYGEMADCCAKQPERNECFLOHDDNPNPLRVREY 120  
QY 121 DVMTAFHDNEETFLKYLVEIARRHPYFYAPPELLFTAKRYKAAFTCCQAADKAACLLP 180  
DB 121 DVMTAFHDNEETFLKYLVEIARRHPYFYAPPELLFTAKRYKAAFTCCQAADKAACLLP 180  
QY 181 KLDELDEGKASSAKQRLKASQKQGERAFKAWAVARLSORPPKAEFAEYSLVTLTK 240

Db 181 KLELRDEGKASSAKQKLCASQKFGERAFKAWARLSQRPKAEFAEVSQKVTDTLK 240  
Qy 241 VTECHGDILLECADDRADIAKYICENODSISSKLKECKEPLLEKSHGICIAEVENDMPA 300  
Db 241 VTECHGDILLECADDRADIAKYICENODSISSKLKECKEPLLEKSHGICIAEVENDMPA 300  
Qy 301 DLPSLAADFVSKDVCKNNAEAKDVLGMFLYEYARRHPDYSVLLLRLLAKTYETLEKC 360  
Db 301 DLPSLAADFVSKDVCKNNAEAKDVLGMFLYEYARRHPDYSVLLLRLLAKTYETLEKC 360  
Qy 361 CAAADPHCYAKVDFEKPVEEPQNLKONCELFEOQGEYKFNALLVRYTKKPYQVST 420  
Db 361 CAAADPHCYAKVDFEKPVEEPQNLKONCELFEOQGEYKFNALLVRYTKKPYQVST 420  
Qy 421 PTLVEVSRNLGKVGSKCKHPEAKRMPCAEADYLSVNLNOLCVLHEKTPVSDRVTKCCTES 480  
Db 421 PTLVEVSRNLGKVGSKCKHPEAKRMPCAEADYLSVNLNOLCVLHEKTPVSDRVTKCCTES 480  
Qy 481 LVNRPCPSALEVDETVPKPEFAETFFPHADICTLSEKEROIKKOTALVELVKKPKAT 540  
Db 481 LVNRPCPSALEVDETVPKPEFAETFFPHADICTLSEKEROIKKOTALVELVKKPKAT 540  
Qy 541 KEQLKAVMDFAAEVCKCKADDKETCTFAEKGKILVAASQAALGL 585  
Db 541 KEQLKAVMDFAAEVCKCKADDKETCTFAEKGKILVAASQAALGL 585

## RESULT 8

ABB79006

ID ABB79006 standard; Protein; 585 AA.

AC ABB79006;

XX ABB79006;

DT 01-AUG-2002 (first entry)

DE Human mature albumin protein SEQ ID NO:18.

KW Human; growth hormone; hGH; albumin; human serum albumin; HSA;  
KW albumin fusion protein; cytostatic; anorectic; immunosuppressive;  
KW antidiabetic; antirheumatic; antiarthritic; psoriasis; cancer;  
KW non-Hodgkin's lymphoma; obesity; transplant rejection; psoriasis;  
KW type I diabetes mellitus; rheumatoid arthritis.

OS Homo sapiens.

FH Key Location/Qualifiers

FT Domain 1..194

FT Domain /label= 1

FT Domain 1..105

FT Disulfide-bond /label= subdomain

FT Disulfide-bond 53..62

FT Disulfide-bond 75..91

FT Disulfide-bond 90..101

FT Region 106..119

FT Domain /note= "flexible inter-subdomain linker region"

FT Domain 120..194

FT Disulfide-bond /label= subdomain

FT Disulfide-bond 124..169

FT Disulfide-bond 168..177

FT Domain 195..387

FT Domain /label= 2

FT Domain 195..291

FT Disulfide-bond /label= subdomain

FT Disulfide-bond 245..253

FT Disulfide-bond 265..279

FT Disulfide-bond 278..289

FT Region 292..315

FT Domain /note= "flexible inter-subdomain linker region"

FT Domain 316..387

FT Disulfide-bond /label= subdomain

FT Disulfide-bond 316..361

FT Disulfide-bond 360..369

FT Domain 388..585  
FT Domain /label= 3  
FT Domain 388..491  
FT Disulfide-bond /label= subdomain  
FT Disulfide-bond 392..438  
FT Disulfide-bond 437..448  
FT Disulfide-bond 461..477  
FT Disulfide-bond 476..487  
FT Region 492..511  
FT /note= "flexible inter-subdomain linker region"

FT Domain 512..585

FT Disulfide-bond /label= subdomain

FT Disulfide-bond 514..559

FT Disulfide-bond 558..567

XX WO200179442-A2.

XX 25-OCT-2001.

XX 12-APR-2001; 2001WO-USL1850.

XX 12-APR-2000; 2000US-229358P.

XX 25-APR-2000; 2000US-199384P.

XX 21-DEC-2000; 2000US-256931P.

XX (HUMA-) HUMAN GENOME SCI INC.

XX Rosen CA, Haseltine WA;

XX WPI; 2001-611723/70.

XX N-PSDB; ABN87288.

XX New albumin fusion proteins, useful for treating diseases and disorders

XX such as cancer, comprise therapeutic protein fused to albumin -

XX Claim 1; Fig 11; 413pp: English.

XX The present invention describes an albumin fusion protein (I) comprising

XX a therapeutic protein; X and (a fragment or variant of) albumin

XX comprising a the fully defined sequence in ABB79006 of 585 amino acids,

XX (where the fragment or variant has albumin or therapeutic protein: X

XX activity). (I) can have cytostatic, anorectic, immunosuppressive,

XX antidiabetic, antirheumatic, antiarthritic and psoriatic activities.

XX Albumin fusion proteins are stabilised therapeutic proteins e.g.

XX antibodies to C5, C242 and CD80 useful for treating various diseases

XX and disorders such as non-Hodgkin's lymphoma, cancer, obesity,

XX transplant rejection, type I diabetes mellitus, rheumatoid arthritis

XX and psoriasis. Fusing albumin to therapeutic proteins stabilises the

XX therapeutic protein, extends the shelf life and retains the in vitro or

XX in vivo biological activity. It also reduces the need to formulate

XX protein solutions with large excesses of carrier proteins to prevent

XX loss of therapeutic proteins due to factors such as binding to the

XX container. The fusion proteins are easily dispensed with a simple

XX formulation requiring minimal post storage manipulation. The fusion of

XX therapeutic proteins to albumin confers stability in aqueous or other

XX solution. The present sequence represents the mature human albumin (HA)

XX protein which is used in the exemplification of the present invention.

XX SQ Sequence 585 AA;

XX Query Match 100.0%; Score 3103; DB 22; Length 585;

XX Best Local Similarity 100.0%; Pred. No. 1e-254;

XX Matches 585; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 DAHKSEVAHFKDLGEENFKALVIAFAQYLQCCPFEDHVKLVNVEFTAKTVADSEAE 60

Db 1 DAHKSEVAHFKDLGEENFKALVIAFAQYLQCCPFEDHVKLVNVEFTAKTVADSEAE 60

Qy 61 NCDKSLHTLFGDKLCIVATLRETYGEMADCCAKOEERNECFLOHKDDNPNLPLVPEV 120

Db 61 NCDKSLHTLFGDKLCIVATLRETYGEMADCCAKOEERNECFLOHKDDNPNLPLVPEV 120

Qy 121 DVMCTAFHDNEETFLKKLYIETARRHPYFAPELLFFAKRYKAFTCECCQAADKAACLP 180

Db 121 DVACTAFHNEETFLKYLVEIARRHPYFYAPELLFFAKRYKAAFTCCQADKACLLP 180  
QY 181 KIDELRDEGKASSAKORLKASLOKFGRAFANAVARLSORFPKAEFAEVSKLVDLTK 240  
Db 181 KIDELRDEGKASSAKORLKASLOKFGRAFANAVARLSORFPKAEFAEVSKLVDLTK 240  
QY 241 VHTCCCHGDLLECCADRADLAKYICENODSISKLKCECEKPLEKSHCIAEVNDMPA 300  
Db 241 VHTCCCHGDLLECCADRADLAKYICENODSISKLKCECEKPLEKSHCIAEVNDMPA 300  
QY 301 DLPSLAADPVESKDVCKNYAEAKDVLGMFLYFYARRHPDYVSVLLRLAKTYETLEKC 360  
Db 301 DLPSLAADPVESKDVCKNYAEAKDVLGMFLYFYARRHPDYVSVLLRLAKTYETLEKC 360  
QY 361 CAAADPHECYAKVDFEKPFLVEPQNLKONCELFQEGYKQNALLYRYTKVPQYST 420  
Db 361 CAAADPHECYAKVDFEKPFLVEPQNLKONCELFQEGYKQNALLYRYTKVPQYST 420  
QY 421 PTLVEVSRNLGKVGSKCKHPEAKRMPCAEDYLSVNLQCVLHFKTPVSDRVTCKCTES 480  
Db 421 PTLVEVSRNLGKVGSKCKHPEAKRMPCAEDYLSVNLQCVLHFKTPVSDRVTCKCTES 480  
QY 481 LVNRCEPSALEVDYVPEKFEFAETFTPHADICTLSEKEROIKKOTALVELVKKPKAT 540  
Db 481 LVNRCEPSALEVDYVPEKFEFAETFTPHADICTLSEKEROIKKOTALVELVKKPKAT 540  
QY 541 KEQLKAVMDPFAAFVEKCKKADDKETCFRAEGKELVAASQAALGL 585  
Db 541 KEQLKAVMDPFAAFVEKCKKADDKETCFRAEGKELVAASQAALGL 585

## RESULT 9

AAE13399 standard; Protein: 585 AA.

ID AAE13399;

AC AAE13399;

XX 12-FEB-2002 (first entry)

DT 12-FEB-2002 (first entry)

DE Human albumin (HA) protein.

XX Human; albumin; HA; fusion protein; immune system disorder; syphilis;

XX transplant rejection; blood related disorder; myocardial infarction;

KW hyperproliferative disorder; acute myeloid leukaemia; renal disorder;

KW glomerulonephritis; cardiovascular disorder; arrhythmia; rhinitis;

KW respiratory disorder; neurological disease; Alzheimer's disease;

KW endocrine disorder; pheochromocytoma; reproductive system disorder;

KW measles; gastrointestinal disorder; irritable bowel syndrome; HIV;

KW human immunodeficiency virus; wound healing; renal cell carcinoma;

KW melanoma; gene therapy.

XX Homo sapiens.

OS Homo sapiens.

XX Key

XX Location/Qualifiers

FT 54..61

FT /label= Loop\_I

FT 76..89

FT /label= Loop\_II

FT 92..100

FT /label= Loop\_III

FT 170..176

FT /label= Loop\_IV

FT 247..252

FT /label= Loop\_V

FT 266..277

FT /label= Loop\_VI

FT 280..288

FT /label= Loop\_VII

FT 362..368

FT /label= Loop\_VIII

FT 439..447

FT /label= Loop\_IX

FT

Domain 461..475  
/label= Loop\_X  
Domain 478..486  
/label= Loop\_XI  
Domain 560..566  
/label= Loop\_XII

W0200179258-AL.

25-OCT-2001.

12-APR-2001; 2001WO-US12008.

12-APR-2000; 2000US-229358P.

25-APR-2000; 2000US-199384P.

21-DEC-2000; 2000US-256931P.

(HUMA-) HUMAN GENOME SCI INC.

(PRIN-) PRINCIPIA PHARM CORP.

Rosen CA, Sadeghi H, Prior CP, Turner AJ;

WPI; 2001-602931/68.

N-PSDB; AAD22287.

Albumin fusion proteins comprising a therapeutic protein and albumin,

useful in the treating metastatic renal cell carcinoma, metastatic

melanoma, malignant melanoma, renal cell carcinoma, HIV (human

immunodeficiency virus) or infection -

Claim 1; Fig 9; 325pp; English.

The invention relates to albumin fusion proteins comprising therapeutic

protein and human albumin (HA). The albumin fusion proteins are useful

in the treatment, prevention, diagnosis, and/or detection of diseases,

disorders such as immune system disorders (transplant rejection); blood

related disorders (myocardial infarction); hyperproliferative disorders

(childhood acute myeloid leukaemia); renal disorder (glomerulonephritis);

cardiovascular disorders (arrhythmias); respiratory disorders

(non-allergic rhinitis); neurological diseases (Alzheimer's disease);

endocrine disorders (pheochromocytoma); reproductive system disorders

(syphilis); infectious diseases (measles); gastrointestinal disorders

(irritable bowel syndrome) and wound healing. The albumin fusion

proteins are also used in the treatment of metastatic renal cell

carcinoma, metastatic melanoma, malignant melanoma and HIV (human

immunodeficiency virus) infection. Nucleic acid encoding albumin fusion

protein is useful in gene therapy. The present sequence is human

albumin (HA) protein.

Sequence 585 AA;

Query Match 100.0%; Score 3103; DB 22; Length 585;

Best Local Similarity 100.0%; Pred. No. 1e-254;

Matches 585; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 DAHSEVAHRFKDGEENFKALVLAFAQYLQOCPPEDHVKLVNEVTEFAKTCVADESAE 60

Db 1 DAHSEVAHRFKDGEENFKALVLAFAQYLQOCPPEDHVKLVNEVTEFAKTCVADESAE 60

QY 61 NCDKSLHTLFGDKLCTVATLRETYGEMADCCAKQEPERNECFQHKDNDNPLRLVPEV 120

Db 61 NCDKSLHTLFGDKLCTVATLRETYGEMADCCAKQEPERNECFQHKDNDNPLRLVPEV 120

QY 121 DVMCTAFHDNEETFLKYLVEIARRHPYFYAPELLFFAKRYKAAFTCCQADKACLLP 180

Db 121 DVMCTAFHDNEETFLKYLVEIARRHPYFYAPELLFFAKRYKAAFTCCQADKACLLP 180

QY 181 KIDELRDEGKASSAKORLKASLOKFGRAFANAVARLSORFPKAEFAEVSKLVDLTK 240

Db 181 KIDELRDEGKASSAKORLKASLOKFGRAFANAVARLSORFPKAEFAEVSKLVDLTK 240

QY 241 VHTCCCHGDLLECCADRADLAKYICENODSISKLKCECEKPLEKSHCIAEVNDMPA 300

Db 241 VHTCCCHGDLLECCADRADLAKYICENODSISKLKCECEKPLEKSHCIAEVNDMPA 300

Db 241 VTECHGDLLEACDADRADLAKYICENODSISSEKLECKEPLLEKSHCIAEVENDEMPA 300  
 QY 301 DLPISLAADFVESKDVCKNYAEAKDVLGFMFLYEVARRHPDYSVLLRLAKTYETILEK 360  
 Db 301 DLPISLAADFVESKDVCKNYAEAKDVLGFMFLYEVARRHPDYSVLLRLAKTYETILEK 360  
 QY 361 CAADAPHECYAKVDFEFKPLVEEPQNLKQNCSELFQOLGEYKFNALVRYTKKVPQVST 420  
 Db 361 CAADAPHECYAKVDFEFKPLVEEPQNLKQNCSELFQOLGEYKFNALVRYTKKVPQVST 420  
 QY 421 PTLVEVSRNLGKVGSKCKHPEAKRMPCAEDYLSVNLQNLVHEKTPVSDRVTKCCTES 480  
 Db 421 PTLVEVSRNLGKVGSKCKHPEAKRMPCAEDYLSVNLQNLVHEKTPVSDRVTKCCTES 480  
 QY 481 LVNRRPCFSALEVDETYVPKEFNAETFFHADICTLSEKERQIKKQOTALVELVVKHKPAT 540  
 Db 481 LVNRRPCFSALEVDETYVPKEFNAETFFHADICTLSEKERQIKKQOTALVELVVKHKPAT 540  
 QY 541 KEOLKAVMDPFAAFVEKCKCCKADDDKTCFAEKGKLVAAQAALGL 585  
 Db 541 KEOLKAVMDPFAAFVEKCKCCKADDDKTCFAEKGKLVAAQAALGL 585

RESULT 10  
 AAM52567  
 ID AAM52567 standard; Protein; 585 AA.  
 AC AAM52567;  
 XX  
 DT 05-FEB-2002 (first entry)  
 DE Mature human serum albumin.  
 XX  
 KW Human; serum albumin; HA; antiinflammatory; immunosuppressive; cardiant;  
 KW nootropic; neuroprotective; gene therapy; immune disorder; wound healing;  
 KW hyperproliferative disorder; renal disorder; cardiovascular disorder;  
 KW respiratory disorder; neurological disease; endocrine disorder;  
 KW reproductive system disorder; infectious disease;  
 KW gastrointestinal disorder.  
 XX  
 OS Homo sapiens.  
 XX  
 PN W02000179444-A2.  
 XX  
 PD 25-OCT-2001.  
 XX  
 PF 12-APR-2001; 2001WO-US12013.  
 XX  
 PR 12-APR-2000; 2000US-229338P.  
 PR 25-APR-2000; 2000US-199384P.  
 PR 21-DEC-2000; 2000US-256931P.  
 XX  
 PA (HUMA-) HUMAN GENOME SCI INC.  
 XX  
 PI Rosen CA, Haseltine WA;  
 XX  
 DR WPI; 2001-616755/71.  
 DR N-PSDB; ABA03057.  
 XX  
 PT Albumin fusion proteins comprising a therapeutic protein and albumin,  
 useful in the treating immune system disorders (e.g. transplant  
 rejection), blood related disorders (e.g. myocardial infarction) and  
 hyperproliferative disorders -  
 XX  
 PS Claim 1; Fig 15; 606pp; English.  
 XX

CC hyperproliferative disorders (e.g. childhood acute myeloid leukemia),  
 CC renal disorders (e.g. glomerulonephritis), cardiovascular disorders (e.g.  
 CC arrhythmias), respiratory disorders (e.g. non-allergic rhinitis),  
 CC neurological diseases (e.g. Alzheimer's disease), endocrine disorders  
 CC (e.g. pheochromocytoma), reproductive system disorders (e.g. syphilis),  
 CC infectious diseases (e.g. measles), gastrointestinal disorders (e.g.  
 CC irritable bowel syndrome) and wound healing.  
 XX  
 SQ Sequence 585 AA;  
 Query Match 100.0%; Score 3103; DB 22; Length 585;  
 Best Local Similarity 100.0%; Pred. No. 1e-254;  
 Matches 585; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 DAHSEVAHFRKDLGSENFALVIAFAQYLOQCFFEDHVKLVNEVTEFAKTVADSEAE 60  
 Db 1 DAHSEVAHFRKDLGSENFALVIAFAQYLOQCFFEDHVKLVNEVTEFAKTVADSEAE 60  
 QY 61 NCDKSLHTLFGDKLCTVATLRETYGEMADCCAKOEPERNECFLOHKDDNPNLPRIVRPEV 120  
 Db 61 NCDKSLHTLFGDKLCTVATLRETYGEMADCCAKOEPERNECFLOHKDDNPNLPRIVRPEV 120  
 QY 121 DVMCTAFHDNEETFLKKYLYETARRHPYFYAPPELLFFAKRYKAAFTCCQAAADKAACLLP 180  
 Db 121 DVMCTAFHDNEETFLKKYLYETARRHPYFYAPPELLFFAKRYKAAFTCCQAAADKAACLLP 180  
 QY 181 KLDELDEGKASSAKORLKCASLOKFGERAFAKAWARLSORFPAEFAEYKLVTLDTLK 240  
 Db 181 KLDELDEGKASSAKORLKCASLOKFGERAFAKAWARLSORFPAEFAEYKLVTLDTLK 240  
 QY 241 VHTCCGHDLLLEACDADRADLAKYICENODSISSEKLECKEPLLEKSHCIAEVENDEMPA 300  
 Db 241 VHTCCGHDLLLEACDADRADLAKYICENODSISSEKLECKEPLLEKSHCIAEVENDEMPA 300  
 QY 301 DLPISLAADFVESKDVCKNYAEAKDVLGFMFLYEVARRHPDYSVLLRLAKTYETILEK 360  
 Db 301 DLPISLAADFVESKDVCKNYAEAKDVLGFMFLYEVARRHPDYSVLLRLAKTYETILEK 360  
 QY 361 CAADAPHECYAKVDFEFKPLVEEPQNLKQNCSELFQOLGEYKFNALVRYTKKVPQVST 420  
 Db 361 CAADAPHECYAKVDFEFKPLVEEPQNLKQNCSELFQOLGEYKFNALVRYTKKVPQVST 420  
 QY 421 PTLVEVSRNLGKVGSKCKHPEAKRMPCAEDYLSVNLQNLVHEKTPVSDRVTKCCTES 480  
 Db 421 PTLVEVSRNLGKVGSKCKHPEAKRMPCAEDYLSVNLQNLVHEKTPVSDRVTKCCTES 480  
 QY 481 LVNRRPCFSALEVDETYVPKEFNAETFFHADICTLSEKERQIKKQOTALVELVVKHKPAT 540  
 Db 481 LVNRRPCFSALEVDETYVPKEFNAETFFHADICTLSEKERQIKKQOTALVELVVKHKPAT 540  
 QY 541 KEOLKAVMDPFAAFVEKCKCCKADDDKTCFAEKGKLVAAQAALGL 585  
 Db 541 KEOLKAVMDPFAAFVEKCKCCKADDDKTCFAEKGKLVAAQAALGL 585

RESULT 11  
 AAEI3129  
 ID AAEI3129 standard; Protein; 585 AA.  
 XX  
 AC AAEI3129;  
 XX  
 DT 28-JAN-2002 (first entry)  
 XX  
 DE Human albumin (HA).  
 XX  
 KW Human; albumin; HA; fusion protein; therapeutic protein; vulnarary;  
 KW immune system disorder; transplant rejection; blood related disorder;  
 KW myocardial infarction; hyperproliferative disorder; glomerulonephritis;  
 KW childhood acute myeloid leukemia; cardiovascular disorder; arrhythmia;  
 KW respiratory disorder; gene therapy; non-allergic rhinitis; nootropic;  
 KW neurological disease; Alzheimer's disease; reproductive system disorder;  
 KW endocrine disorder; pheochromocytoma; infectious disease; antiarthritic;  
 KW measles; gastrointestinal disorder; irritable bowel syndrome; syphilis;  
 KW



KW wound healing; antiinflammatory; immunosuppressive; neuroprotective;  
KW cardiatic; cytostatic; antileukaemic; antirheumatic; antimicrobial;  
KW renal disorder.  
XX

OS Homo sapiens.

XX Key Location/Qualifiers

XX Domain 54..61 /label= Loop\_I

XX Domain 76..89 /label= Loop\_II

XX Domain 92..100 /label= Loop\_III

XX Domain 170..176 /label= Loop\_IV

XX Domain 247..252 /label= Loop\_V

XX Domain 286..277 /label= Loop\_VI

XX Domain 280..288 /label= Loop\_VII

XX Domain 362..368 /label= Loop\_VIII

XX Domain 439..447 /label= Loop\_IX

XX Domain 461..475 /label= Loop\_X

XX Domain 478..486 /label= Loop\_XI

XX Domain 560..566 /label= Loop\_XII

XX WO200179443-A2.

XX 25-OCT-2001.

XX 12-APR-2001; 2001WO-US11924.

XX 12-APR-2000; 2000US-229358P.

XX 25-APR-2000; 2000US-199384P.

XX 21-DEC-2000; 2000US-256931P.

XX (HUMA-) HUMAN GENOME SCI INC.

XX Rosen CA, Haseltine WA;

XX WPI; 2001-616754/71.

XX N-PSDB; RAD21638.

XX Albumin fusion proteins comprising a therapeutic protein and albumin,

XX useful in the treating immune system disorders (e.g. transplant

XX rejection), blood related disorders (e.g. myocardial infarction) and

XX hyperproliferative disorders -

XX Claim 1; Fig 9; 380pp; English.

XX The invention relates to albumin fusion proteins comprising therapeutic

XX protein and human albumin (HA). Therapeutic protein fused to albumin

XX have an extended shelf-life. The albumin fusion proteins are useful in

XX the treatment, prevention, diagnosis and/or detection of diseases,

XX disorders such as immune system disorders (e.g. transplant rejection),

XX blood related disorders (e.g. myocardial infarction), hyperproliferative

XX disorders (e.g. childhood acute myeloid leukaemia), renal disorders

XX (e.g. glomerulonephritis), cardiovascular disorders (e.g. arrhythmias),

XX respiratory disorders (e.g. non-allergic rhinitis), neurological

XX diseases (e.g. Alzheimer's disease), endocrine disorders (e.g.

XX pheochromocytoma), reproductive system disorders (e.g. syphilis),

XX infectious diseases (e.g. measles), gastrointestinal disorders (e.g.

XX irritable bowel syndrome) and wound healing. Nucleic acids encoding

XX albumin fusion protein is used in gene therapy. The present sequence

XX is human albumin (HA) protein.

XX Sequence 585 AA;

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Query Match 100.0%; Score 3103; DB 22; Length 585;  
Best Local Similarity 100.0%; Pred. No. 1e-254;  
Matches 585; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 DAHSEVAHFRKDLGEENFKALVLIAPAFYLOQCPEDHVKLVNEVTEFAKTCADESAE 60.  
DB 1 DAHSEVAHFRKDLGEENFKALVLIAPAFYLOQCPEDHVKLVNEVTEFAKTCADESAE 60  
QY 61 NCDKSLHTLFGDKLCTVATLRETYGEMADCCAKQEPERNECFLOHKDDNENLRLVRPEV 120  
DB 61 NCDKSLHTLFGDKLCTVATLRETYGEMADCCAKQEPERNECFLOHKDDNENLRLVRPEV 120  
QY 121 DVMCTAFHDNEETFLKKYLYEIARRHFFYFAPPELLFFAKRYKAAFTCCQAADKAACILP 180  
DB 121 DVMCTAFHDNEETFLKKYLYEIARRHFFYFAPPELLFFAKRYKAAFTCCQAADKAACILP 180  
QY 161 KIDELRDEGKASSAKQRLKCSLOKFGERAFKAWAVARLSQRFPAEFAEYVSKLVTDLTK 240  
DB 161 KIDELRDEGKASSAKQRLKCSLOKFGERAFKAWAVARLSQRFPAEFAEYVSKLVTDLTK 240  
QY 241 VHTCCCHGDLLECCADDRADLAKYICENODSISSKLKECCERPLLEKSHCIAEYENDEMPA 300  
DB 241 VHTCCCHGDLLECCADDRADLAKYICENODSISSKLKECCERPLLEKSHCIAEYENDEMPA 300  
QY 301 DPLSLAADFVESKDVCKNYAEAKDVFGLMFLYFYARRHPDYSVLLRLAKTETTLEKC 360  
DB 301 DPLSLAADFVESKDVCKNYAEAKDVFGLMFLYFYARRHPDYSVLLRLAKTETTLEKC 360  
QY 361 CAADPHECYAKVDFDEKPLVEEPQNLKONCFELFQGEYKFNALLVRYTKVPQVST 420  
DB 361 CAADPHECYAKVDFDEKPLVEEPQNLKONCFELFQGEYKFNALLVRYTKVPQVST 420  
QY 421 PTLVEVSRLNGKVGSKCKCKHPEAKMPCAEYLSVYNOLCVLHEKTPVSDRVTKCTES 480  
DB 421 PTLVEVSRLNGKVGSKCKCKHPEAKMPCAEYLSVYNOLCVLHEKTPVSDRVTKCTES 480  
QY 481 LVNRRPCFSALEVDEYVYKFNENETTFHADICTLSEKEROIKKQALVELVKKHPRAT 540  
DB 481 LVNRRPCFSALEVDEYVYKFNENETTFHADICTLSEKEROIKKQALVELVKKHPRAT 540  
QY 541 KEOLKAVMDDFAAFEVKECKCKADKDKTCTCFABEGKLVAAQAALGL 585  
DB 541 KEOLKAVMDDFAAFEVKECKCKADKDKTCTCFABEGKLVAAQAALGL 585

RESULT 12

AAE12403

ID AAE12403 standard; Protein; 585 AA.

XX AC AAE12403;

XX AC AAE12403;

XX DT 18-DEC-2001 (first entry)

XX DE Human albumin (HA).

XX KW Human; albumin; HA; immune system disorder; transplant rejection;

XX KW blood related disorder; myocardial infarction; glomerulonephritis;

XX KW hyperproliferative disorder; childhood acute myeloid leukaemia;

XX KW renal cell carcinoma; cardiovascular disorder; vulnery; melanoma;

XX KW arrhythmia; respiratory disorder; non-allergic rhinitis; anticelluemic;

XX KW neurologic disease; Alzheimer's disease; endocrine disorder; measles;

XX KW pheochromocytoma; reproductive system disorder; neuroprotective; syphilis;

XX KW infectious disease; gastrointestinal disorder; wound healing; noctropis;

XX KW irritable bowel syndrome; HIV; human immunodeficiency virus infection;

XX KW cytostatic; antiinflammatory; gene therapy; immunosuppressive; cardiant;

XX KW antiarthritic; antirheumatic; renal disorder; antimicrobial.

XX OS Homo sapiens.

XX PH Key Location/Qualifiers

XX FT Domain 54..61

XX FT /label= Loop\_I

1	DAHKSEVAHREFKDLGEENEKALVILIAFAQYLQOCFFEDHVKLVNEYTEFAKTCVADESAAE	160
61	NODKSLHTLFGDKLCITVATLRETTGEMADCCAKQBPBERNECFLOHKDDNPMLPLRVPEV	120
61	NODKSLHTLFGDKLCITVATLRETTGEMADCCAKQBPBERNECFLOHKDDNPMLPLRVPEV	120
121	DVMCTAFHDNEETFLKKLYELIARRHPYFYAPPELLFAKRYKAAFTCCQAADKAAACLLP	180
121	DVMCTAFHDNEETFLKKLYELIARRHPYFYAPPELLFAKRYKAAFTCCQAADKAAACLLP	180
181	KDELRLDGRSGASAKORUKCASLOKQGERAFKAWAVALSQRPFKAPFAEVSKLVTDLTK	240
181	KDELRLDGRSGASAKORUKCASLOKQGERAFKAWAVALSQRPFKAPFAEVSKLVTDLTK	240
241	VHTECHGDLLECADRADLAKYICENQDSTISSKLKECCEKPLELKHSHCIAEVNDEMPA	300
241	VHTECHGDLLECADRADLAKYICENQDSTISSKLKECCEKPLELKHSHCIAEVNDEMPA	300
301	DLPSLAADFVSFVKDVCNKVYAEAKOVFLGMLLEYIYARRHPDYSVWLLRLAKYIETLEKC	360
301	DLPSLAADFVSFVKDVCNKVYAEAKOVFLGMLLEYIYARRHPDYSVWLLRLAKYIETLEKC	360
361	CAAADPHCYAKVFDEFKPLVEEPONLIKONCELFQOLGEYKFNALLVRYTKKVPQVST	420
361	CAAADPHCYAKVFDEFKPLVEEPONLIKONCELFQOLGEYKFNALLVRYTKKVPQVST	420
421	PTLVEVSNRLKGVSGCKCKHPKAPKMPKCBADYLSVVLNQLCVLHEKTPVSDRVKTCCTES	480
421	PTLVEVSNRLKGVSGCKCKHPKAPKMPKCBADYLSVVLNQLCVLHEKTPVSDRVKTCCTES	480
481	LVNRRPCFSALEVDEYVYKPENAETFTFHADICTLSEKEROIKKQKTALVELVVKHKPKAT	540
481	LVNRRPCFSALEVDEYVYKPENAETFTFHADICTLSEKEROIKKQKTALVELVVKHKPKAT	540
541	KEQLKAVMDPFAAFVBEKCKCKADDKETCFABEGKKLVAAASQAALGL	585
541	KEQLKAVMDPFAAFVBEKCKCKADDKETCFABEGKKLVAAASQAALGL	585

1 DAHKSEVAHRFKDLGEENFKALVLIAFAQYLQCCPFEDHVKLVNEVTEFAKTCVADESAE 60

PS Claim 1; Fig 1; 20pp; English.

XX The invention related to a method for testing cancer cells. The method is useful for measuring human cancer cell proliferation, particularly for determining the potential for inhibiting cancer cells proliferation using CC albumin-derived peptides. The invention is also useful for drug screening CC assays, as well as for evaluating biopsied tumours. The present sequence CC is human serum albumin (HSA) related to the invention.

XX SQ Sequence 585 AA;

Query Match 100.0%; Score 3103; DB 22; Length 585;  
Best Local Similarity 100.0%; Pred. No. 1e-254;  
Matches 585; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 DAHSEVAHFKDGLGENFKALVLIAPQYLOQCFFEDHVKLVNEVTEFAKTCVADSAE 60  
Db 1 DAHSEVAHFKDGLGENFKALVLIAPQYLOQCFFEDHVKLVNEVTEFAKTCVADSAE 60  
QY 61 NCDKSLHTLFGDKLCTVATLRETYGEMADCCAKOEPERNECFLOHKDDNPPLRLVRPEV 120  
Db 61 NCDKSLHTLFGDKLCTVATLRETYGEMADCCAKOEPERNECFLOHKDDNPPLRLVRPEV 120  
QY 121 DVMTAFHDNEETFLKKYLYEYARRHPYFAPPELLFFAKRYKAFTCCQAAADKAACLLP 180  
Db 121 DVMTAFHDNEETFLKKYLYEYARRHPYFAPPELLFFAKRYKAFTCCQAAADKAACLLP 180  
QY 181 KLDELDEKASSAKORLKASLOKFGERAFKAWAVARLSORPEKAFPAEVSCLVDTLTK 240  
Db 181 KLDELDEKASSAKORLKASLOKFGERAFKAWAVARLSORPEKAFPAEVSCLVDTLTK 240  
QY 241 VHTECHGDLLECDRADLAKYICENQDSISSKLECEKPLEKSHCIAEVENDEMPA 300  
Db 241 VHTECHGDLLECDRADLAKYICENQDSISSKLECEKPLEKSHCIAEVENDEMPA 300  
QY 301 DLPSLAADFVESKDVCKNVAEAKDVLGMFLYFYARRHPDYFVSVLLRLAKYETTTLEK 360  
Db 301 DLPSLAADFVESKDVCKNVAEAKDVLGMFLYFYARRHPDYFVSVLLRLAKYETTTLEK 360  
QY 361 CAADPHCEYAKVDFEKPFLVEEPONLIKONCELPQELGEYKQFONALLVRYTKPVYST 420  
Db 361 CAADPHCEYAKVDFEKPFLVEEPONLIKONCELPQELGEYKQFONALLVRYTKPVYST 420  
QY 421 PTLVEVSRNLGKVGSKCKHPEAKRMPCAEADYLSVLNQLCVLHETPTVSDRTKCTES 480  
Db 421 PTLVEVSRNLGKVGSKCKHPEAKRMPCAEADYLSVLNQLCVLHETPTVSDRTKCTES 480  
QY 481 LVNRRCFSALEVDYTPVPEFNAETFTTHADICTLSKEQIKKQFALVELVKKPKAT 540  
Db 481 LVNRRCFSALEVDYTPVPEFNAETFTTHADICTLSKEQIKKQFALVELVKKPKAT 540  
QY 541 KEOLKAVMDDFAAVFEKCKCCKADKCTCFABEGKILVAASQAALGL 585  
Db 541 KEOLKAVMDDFAAVFEKCKCCKADKCTCFABEGKILVAASQAALGL 585

RESULT 14

ABG63321  
ID: ABG63321 standard; protein; 585 AA.

XX AC ABG63321;

XX DT 27-AUG-2002 (first entry)

XX DE Human serum albumin (HSA) protein.

XX KW Albumin fusion protein; therapeutic protein X; human albumin; HA;  
KW human serum albumin; HSA; cancer; reproductive disorder;  
KW digestive disorder; immune disorder; endocrine disorder;  
KW haematopoietic disorder; neural disorder; connective disorder;  
KW cytostatic; antiinfectivity; antiinflammatory; antitumor;  
KW immunomodulator; anti-HIV; antidiabetic; haemostatic; nontropic;  
KW neuroprotective; antiparkinsonian; antimicrobial; neuroleptic;

osteopathic; antiarthritic.

XX OS Homo sapiens.  
XX PN WO200177137-A1.  
XX XX 18-OCT-2001.

XX PF 12-APR-2001; 2001WO-US11988.

XX PR 12-APR-2000; 2000US-29338P.

XX PR 25-APR-2000; 2000US-199384P.

XX PR 21-DEC-2000; 2000US-256931P.

XX PA (HUMA-) HUMAN GENOME SCI INC.

XX XX Rosen CA, Haseltine WA;

XX WI 2002-010886/01.

XX DR N-PSDB; ABK93280.

XX PT New fusion protein for treating disease e.g. diabetes comprises an albumin fused to a therapeutic protein -

XX PS Claim 1; Fig 15; 2102pp; English.

XX CC The present invention relates to albumin fusion proteins comprising a therapeutic protein X and human albumin (HA, also known as human serum albumin, HSA). The proteins are useful for treating a disease or disorder that may be modulated by therapeutic protein X. The albumin extends the shelf-life of protein X, and may increase its biological activity in vitro/in vivo activity. The protein is useful for treating and diagnosing disorders such as cancer, reproductive disorders, digestive disorders (e.g. Crohn's disease, ulcerative colitis), immune disorders (e.g. acquired immunodeficiency syndrome, AIDS), endocrine disorders (e.g. diabetes), haematopoietic disorders, neural disorders (e.g. Alzheimer's, Parkinson's, Creutzfeldt-Jacob disease, encephalomyelitis, meningitis, schizophrenia), and connective disorders (e.g. osteoporosis, arthritis). The present sequence represents HSA (HA) protein.

XX SQ Sequence 585 AA;

Query Match 100.0%; Score 3103; DB 23; Length 585;

Best Local Similarity 100.0%; Pred. No. 1e-254;

Matches 585; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 DAHSEVAHFKDGLGENFKALVLIAPQYLOQCFFEDHVKLVNEVTEFAKTCVADSAE 60  
Db 1 DAHSEVAHFKDGLGENFKALVLIAPQYLOQCFFEDHVKLVNEVTEFAKTCVADSAE 60  
QY 61 NCDKSLHTLFGDKLCTVATLRETYGEMADCCAKOEPERNECFLOHKDDNPPLRLVRPEV 120  
Db 61 NCDKSLHTLFGDKLCTVATLRETYGEMADCCAKOEPERNECFLOHKDDNPPLRLVRPEV 120  
QY 121 DVMTAFHDNEETFLKKYLYEYARRHPYFAPPELLFFAKRYKAFTCCQAAADKAACLLP 180  
Db 121 DVMTAFHDNEETFLKKYLYEYARRHPYFAPPELLFFAKRYKAFTCCQAAADKAACLLP 180  
QY 181 KLDELDEKASSAKORLKASLOKFGERAFKAWAVARLSORPEKAFPAEVSCLVDTLTK 240  
Db 181 KLDELDEKASSAKORLKASLOKFGERAFKAWAVARLSORPEKAFPAEVSCLVDTLTK 240  
QY 241 VHTECHGDLLECDRADLAKYICENQDSISSKLECEKPLEKSHCIAEVENDEMPA 300  
Db 241 VHTECHGDLLECDRADLAKYICENQDSISSKLECEKPLEKSHCIAEVENDEMPA 300  
QY 301 DLPSLAADFVESKDVCKNVAEAKDVLGMFLYFYARRHPDYFVSVLLRLAKYETTTLEK 360  
Db 301 DLPSLAADFVESKDVCKNVAEAKDVLGMFLYFYARRHPDYFVSVLLRLAKYETTTLEK 360  
QY 361 CAADPHCEYAKVDFEKPFLVEEPONLIKONCELPQELGEYKQFONALLVRYTKPVYST 420  
Db 361 CAADPHCEYAKVDFEKPFLVEEPONLIKONCELPQELGEYKQFONALLVRYTKPVYST 420

Db 361 CAADPHECTAKVDFEKLVEEPONLIKQNCLEFOLGEYKFNALLVRTKKVQVST 420  
QY 421 PTLVEVSRLGKVGSRCKHPKAPCAEDYLSVVLNQLCVLHEKTPVSDRVTKCTES 480  
Db 421 PTLVEVSRLGKVGSRCKHPKAPCAEDYLSVVLNQLCVLHEKTPVSDRVTKCTES 480  
QY 481 LVNRRPCFSALEVDYIYVKEFNAETFFHADICTLSEKEROIKKQALVELVKKPKAT 540  
Db 481 LVNRRPCFSALEVDYIYVKEFNAETFFHADICTLSEKEROIKKQALVELVKKPKAT 540  
QY 541 KEQLKAVMDDDFAAFVEKCKADDDKTCFAEGKKLVAAASQAALGL 585  
Db 541 KEQLKAVMDDDFAAFVEKCKADDDKTCFAEGKKLVAAASQAALGL 585

RESULT 15  
ABJ00986  
ID ABJ00986 standard; Protein; 585 AA.  
XX AC ABJ00986;  
XX DT 05-SEP-2002 (first entry)  
XX DE B lymphocyte stimulator protein binding peptide related protein.  
XX KW B lymphocyte stimulator protein binding protein; BlyS; immune disease;  
KW allergy; proliferative disease; infectious disease; arteriosclerosis;  
KW inflammatory disorder; hypergammaglobulinaemia; blood clotting;  
KW ischaemia; graft-versus-host disease; neurodegenerative disease;  
KW immunosuppressive; nephrotropic; antirheumatic; antiarthritic;  
KW neuroprotective; cytostatic; immunostimulant; antitumour; anti-HIV;  
KW antiasthmatic; antiallergic; thyromimetic; anticancer; haemostatic;  
KW dermatologic; antiinflammatory; cardiant; ophthalmological; uropathic;  
KW antidiabetic; antithyroid; antidepressant; hepatotropic.  
XX OS Homo sapiens.  
XX PN WC200216411-A2.  
XX PD 28-FEB-2002.  
XX PF 17-AUG-2001; 2001WO-US25850.  
XX PR 18-AUG-2000; 2000US-226700P.  
XX PS (HUMA-) HUMAN GENOME SCI INC.  
XX PT Beltzer JP, Potter DM, Fleming TL, Rosen CA;  
XX WPI; 2002-499775/53.  
XX The treatment of various diseases e.g. rheumatoid arthritis, comprises  
administering B lymphocyte stimulator binding polypeptide -  
Disclosure; Page 379-382; 387pp; English.

The present invention relates to the treatment, prevention or amelioration of a disease or disorder associated with: aberrant B lymphocyte stimulator (BlyS), BlyS receptor expression or activity; cells of haematopoietic origin; or proliferative disease; and reducing, inhibiting or stimulating immunoglobulin production, B cell proliferation and graft rejection involving administration of BlyS binding polypeptide. The BlyS binding polypeptides are used in the treatment, prevention or amelioration of diseases such as immune system diseases, proliferative diseases, diseases of cells of haematopoietic origin, graft rejection, allergies, infectious diseases, arteriosclerosis, inflammatory disorders, hypergammaglobulinaemia, blood clotting disorders, ischaemia, and neurodegenerative diseases. The present sequence is a protein described in the invention.

Sequence 585 AA;

Query Match 100.0%; Score 3103; DB 23; Length 585;

Best Local Similarity 100.0%; Pred. No. 1e-254;  
Matches 585; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 DAHSEVAHFRKDLGEENFKALVLIIFAQYLOQCPEDEHVKLVNEVTEFAKTCVADESAE 60  
Db 1 DAHSEVAHFRKDLGEENFKALVLIIFAQYLOQCPEDEHVKLVNEVTEFAKTCVADESAE 60  
QY 61 NCDKSLHTLFGDKLCTVATLRETYGEMADCCAKOBERNECFLOHKDDNPNLPRVPEV 120  
Db 61 NCDKSLHTLFGDKLCTVATLRETYGEMADCCAKOBERNECFLOHKDDNPNLPRVPEV 120  
QY 121 DVMCTAFHNEETFLKKYLYEIARRHPYFYAPPELLFFAKRYKAAFTCCQAADKAACLIP 180  
Db 121 DVMCTAFHNEETFLKKYLYEIARRHPYFYAPPELLFFAKRYKAAFTCCQAADKAACLIP 180  
QY 181 KLDELDEGKASSAKORLKCSLQKFGERAFKAWAVARLSORFFKAEFAVSKLYVTDLAK 240  
Db 181 KLDELDEGKASSAKORLKCSLQKFGERAFKAWAVARLSORFFKAEFAVSKLYVTDLAK 240  
QY 241 VHTCCCHGDLLECCADDDRADLAKYICENQDSISSKLKECCPELLEKSHCHIAEVENDEMPA 300  
Db 241 VHTCCCHGDLLECCADDDRADLAKYICENQDSISSKLKECCPELLEKSHCHIAEVENDEMPA 300  
QY 301 DLPSLAADFVSKCKVCKNVAEAKDVLGMFLYEAARRHEDYSVLLRLAKTETTLK 360  
Db 301 DLPSLAADFVSKCKVCKNVAEAKDVLGMFLYEAARRHEDYSVLLRLAKTETTLK 360  
QY 361 CAAADPECHYAKYVDFEFPKPLVEEPQNLKONCELFQELGEYKFNALLVRYTKKPVQST 420  
Db 361 CAAADPECHYAKYVDFEFPKPLVEEPQNLKONCELFQELGEYKFNALLVRYTKKPVQST 420  
QY 421 PTLVEVSRLGKVGSRCKHPKAPCAEDYLSVVLNQLCVLHEKTPVSDRVTKCTES 480  
Db 421 PTLVEVSRLGKVGSRCKHPKAPCAEDYLSVVLNQLCVLHEKTPVSDRVTKCTES 480  
QY 481 LVNRRPCFSALEVDYIYVKEFNAETFFHADICTLSEKEROIKKQALVELVKKPKAT 540  
Db 481 LVNRRPCFSALEVDYIYVKEFNAETFFHADICTLSEKEROIKKQALVELVKKPKAT 540  
QY 541 KEQLKAVMDDDFAAFVEKCKADDDKTCFAEGKKLVAAASQAALGL 585  
Db 541 KEQLKAVMDDDFAAFVEKCKADDDKTCFAEGKKLVAAASQAALGL 585

Search completed: July 22, 2003, 11:43:43  
Job time : 41 secs